Hylocichla guttata. Alaska Hermit Thrush.— Monon, Baca County, May 3, 1905 (Warren).

[Hylocichla guttata pallasi. Hermit Thrush.— There seems to have been a misunderstanding or a mixing of specimens that served as the basis of the record on which this species was admitted to the Colorado list. All efforts to locate the Thorne specimens have proved unavailing and it seems best to withdraw the name from the State list.]

Sialia sialis. Bluebird.— Fairly common in extreme eastern Colorado, from the Arkansas River to the Platte, and breeds near Holly (Smith). Noted each year at Yuma, the extreme dates of observation being April 18 and November 1 (Patten). Denver, eggs June 21, 1899 (Dille).

Sialia mexicana bairdi. Chestnut-backed Bluebird.— Yuma, one February 28, 1906 (Patten).

Sialia currucoides. MOUNTAIN BLUEBIRD.— Gaume's Ranch, Baca County, common November 26–29, 1907 (Cary); Springfield, March 1–22, 1908 (Alexander); Yuma, February 28, 1906, and March 18, 1907 (Patten).

THE SINGULAR CASE OF THE BLACK DUCK OF NORTH AMERICA.

BY JONATHAN DWIGHT, JR., M. D.

The case of the Black Duck is one of extreme interest to many people, partly because the species is one of the best known of the North American water-fowl and partly because the naming of a new race has been productive of unexpected consequences. First a shuffle of the scientific names was found necessary and now the new 'race' itself seems to be based upon nothing more tangible than the adult birds, as becomes evident from the material I have gathered. The pitfalls, nomenclatural as well as ornithological, into which even the most eminent authorities may fall are singularly illustrated in a full discussion of the case. As yet, some facts have been missing and some misinterpreted, so that the whole story needs to be retold and from a new standpoint.

Th $_{\odot}$ nomenclatural side may be very briefly dismissed here, as it has already been thoroughly discussed in the pages of 'The Auk' (Vol. XXVI, April, 1909, pp. 175–179). It was in 1902 (Auk, XIX,

April, 1902, pp. 183–188) that Mr. Brewster separated the birds of the northern part of the range of the Black Duck under the name Anas obscura rubripes or Red-legged Black Duck, restricting the name obscura to the southern birds. Presently it was discovered that the name obscura was preoccupied some twenty-five years by an Old World species, so, according to the rules of nomenclature, obscura had to be dropped as a synonym and rubripes took its place. This left the ordinary Black Duck without a name until Mr. Brewster provided the name tristis, so that the two races stand, up to date, as Anas rubripes rubripes and Anas rubripes tristis.

The ornithological side of the question has hitherto been presented only from the describer's standpoint and he has been unfortunate in lacking some trenchant facts that put the others in quite a new light. His characters for the Red-legged Black Duck (rubripes) are bright red legs and feet, a yellow bill, heavy streaking about the head and throat and large size; while the birds (tristis formerly obscura), from which the new form is separated, have brownish legs, dusky olive bills, and less streaking while they are smaller in size. Now, these differences are exactly the ones that distinguish old birds from young whether they occur in the United States or in Canada. My evidence on this point is conclusive for I have skinned and dissected fully fifty specimens representing many localities, north and south, besides examining dozens of others shot by friends or found hanging in the markets. It is rather singular that Mr. Brewster in his articles has said practically nothing of the differences between old and young because the plumages as well as the colors of the soft parts in old and young are quite different. They correspond to the characters that have been considered subspecific and due to geographical variation. This has been suspected but no one has been able to prove it, nor could it be proved from dried museum specimens in which the original colors and age are only matters of guess work.

For some years I have taken great pains to obtain the fresh material necessary for study. A series selected from many fresh specimens sent me from Long Island, New York, shows that the Black Duck, like many of the other ducks, slowly passes from the juvenal into the first winter plumage, a change in the color of the feet and bill taking place at the same time. The feet of grown young

birds, at first an olive-brown, become gradually reddened, and finally in the spring they are of nearly as bright a red as that of the adults, while the dusky bill brightens to greenish and then to yellow-green or yellow. There is nothing unusual in this change of color, which occurs in many species of ducks, as well as among other birds, and we know well how in the case of the Eiders and Scoters there is, in addition to brightening colors, a transformation in the shape and size of the bill. Once the adult colors of the soft parts are attained they are never lost, and so it is with the Black Duck—the bill of the adult is at all seasons of the year a bright greenish yellow and the feet a coral red, these colors dulling only a trifle after the breeding season. In females the colors are regularly duller than those of the males.

There is considerable variation in the time at which young birds acquire the red legs and vellow bill; some of them resemble adults as early as January while others are still dull in April. A very few laggards in vitality seem to remain immature during their first year, as is often the case with other species, but aside from plumage there are other earmarks of immaturity. The bones, the trachea and larvnx and the sexual organs proclaim approximately the age of specimens carefully examined. It is worthy of note that the dusky head-markings of adults merely average darker than those of young birds, which more often have unspotted chins, but the variation in both old and young is considerable. The plumage of adults differs somewhat from that of young birds and it should be remembered, too, that young birds in unlike stages of plumage may be shot on the same day. It may be urged that these variations, due to age and season, belong only to the northern birds and that the southern birds never acquire the red legs and other characters of the supposed rubripes, but such is not the case. There are many difficulties to be overcome in obtaining breeding specimens which would of course settle the question at once. The males become exceedingly shy and difficult to find in the breeding season and nobody wants to slaughter brooding females even if nests be found. Moreover, the game-laws must be respected, especially by collectors. But before spring shooting was abolished some years ago on Long Island, New York, a number of freshly killed birds were sent me that scarcely needed dissection to prove them to be breeding birds. They were

shot at various dates in April and all had red legs. However, it was not until the present year that I secured the last link required in my chain of evidence. Through the courtesy of the Forest, Fish and Game Commission of New York State special permission was granted and an adult male, killed on Long Island, June 11, 1909, came fresh into my hands. This bird has the red legs and other characters supposed to belong to the northern 'race' alone, and should set at rest any lurking belief in the subspecific distinctness of rubripes. The specimen is in full postnuptial moult, and evidently was recently mated.

The opera-glass contingent seems to have missed an opportunity for making observations that would be of value, because some of them must have had a chance to see the color of the legs of summer ducks. I have noticed, without a glass, that the wild birds breeding about the Central Park lakes in New York City have red legs, but such evidence, derived from semi-domesticated water-fowl, is not convincing in itself alone. I would also call attention to the fallibility of trained gunners when a question of scientific importance is at stake. The very man who shot my June bird had previously assured me that the summer birds of Long Island did not have red legs! Yet, he like many other gunners knew there were two kinds of Black Ducks in winter.

Summed up in brief, the evidence shows that all young birds, both in Canada and along the Atlantic Coast of the United States, have brownish legs, while breeding adults from the same localities have red ones. Under these circumstances the 'Red-legged Black Duck' as a subspecies does not appear to have a leg left to stand on — not even a red one. If an ornithologist of Mr. Brewster's ability can go astray in his conclusions, what may not the rest of us do? His two articles should be read afresh to understand how easy it was to take the wrong path, and the episode should be a warning object lesson for all describers to take to heart. Now at last after much expenditure of energy the Black Duck (Anas rubripes) remains an undivided species ranging over eastern North America, and we have only to regret the loss of its time honored name obscura for which at present there seems to be no help.

The Florida Duck (Anas fulvigula), with its southwestern race maculosa, seems to be specifically distinct. It has a black marking

at the base of the bill and a median, angle-shaped line of buff on each tail feather that are lacking in the Black Duck, while the rich buff of the head and throat, immaculate on the chin and parts adjacent, and the broad ochraceous streakings of the body are rarely approached by its northern relative. The Texas race maculosa seems poorly differentiated from fulvigula; the dusky markings about the head are a trifle more extensive and the black at the base of the bill is less conspicuous as a rule. The adults of both have red legs.

It may be well to point out here an error in Ridgway's 'Manual' wherein the Black Duck and the Florida Duck are in the group 'Wing without any white band.' As a matter of fact, in both of these species there is a very distinct band tipping the feathers of the speculum and it is rarely absent even in females.

It is rather beyond the scope of the present paper to take up the two Mexican species (*Anas aberti* and *Anas diazi*) of the Black Duck group, but from descriptions there is certainly room for doubting their specific distinctness from fulvigula.

GENERAL NOTES.

Capture of an American Eider at Chicago.—There appear to be very few authentic records of the American Eider (Somateria dresseri) having been taken on Lake Michigan, so that its occurrence at Chicago may be of interest to readers of 'The Auk.'

On December 1, 1908, an individual of this species was shot by a fisherman over decoys set off the 55th Street Pier near Jackson Park, and was brought to me for identification. It proved to be an immature male in beautiful plumage. I made the skin and had the specimen positively identified by Dr. Ned Dearborn of the Field Museum of Natural History.—J. L. DEVINE, 5478 Ellis Avenue, Chicago, Ill.

Breeding of the Least Bittern (Ardetta exilis) in Chester Co., Pa.— On June 6, 1909, while wading through a cat-tail swamp near Berwyn, Chester Co., Pa., two incomplete Least Bittern's nests were found and one bird seen. On visiting the place again on June 12, one of the nests was found completed, and contained 4 eggs. The nest was situated in a clump of